

# **iVina**

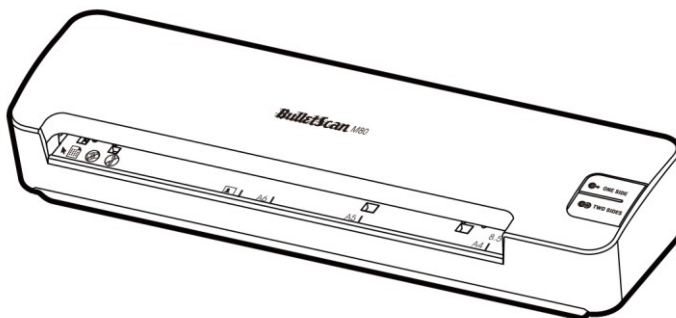
# ***BulletScan***<sup>TM</sup>

## **M80**

## **Duplex Color Mobile Scanner**

### **User's Manual**

**Aug 2010**



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## **FCC Radio Frequency Interference Statement**

This product has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The FCC Class B limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

## **CE Warning**

This product satisfies the Class B limits of EN55022, EN55024 and safety requirements of EN 60950.

## Disposal of Waste Equipment



This symbol on the product or on its packaging indicates that the product can not be disposed of with your other household waste. Instead it should be sent to appropriate facilities for recovery and recycling in an effort to protect human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



As an ENERGY STAR® Partner, iVina Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

\*This machine is certified as Class 1 laser product. This means that this machine does not produce hazardous laser radiation.

## System Requirements

- Microsoft Windows XP/Vista/7
- 1.2 GHz CPU or greater \*
- 512 MB RAM for Windows XP (2+ GB RAM recommended)
- 1 GB RAM for Windows Vista and 7 (2+ GB RAM recommended)
- 500 MB available on the Hard Drive for complete software installation
- USB 2.0 Port
- CD-Rom drive
- Display supporting full color (32 bit) at 800 x 600

\* File conversion speeds and OCR performance are linked to CPU speed. The faster the processor, the better the results.

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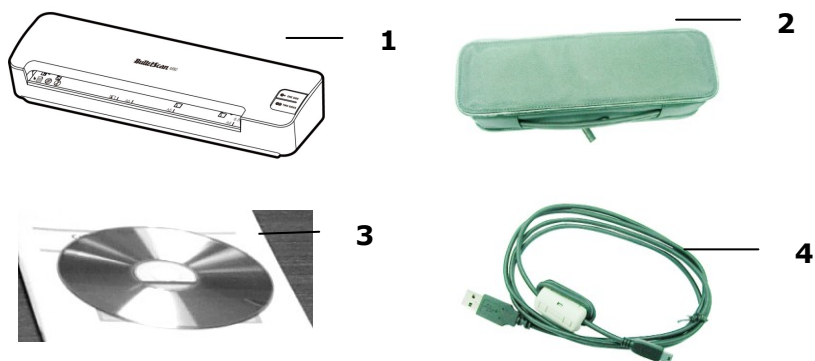


# 1. Introduction

Congratulations on your purchase of the BulletScan M80 mobile document scanner. With this scanner, you can scan documents directly to PDF and other digital file types, increasing your productivity.

Before you install and operate the new scanner, please take a few minutes to read through this manual. It provides proper instructions for you to unpack, install, operate and maintain the scanner.

The following figure indicates the package contents. Please check all the items against your checklist. If you do not receive all the items, please contact your authorized local dealer immediately.



1. Scanner
2. Scanner travel case
3. Installation CD
4. USB cable

**Note:**

Please unpack the packing carefully, and check the contents against the checklist. If any items are missing or damaged, please contact your dealer immediately.



## 2. Scanner Installation

### Precautions

- Keep the scanner out of direct sunlight. Direct exposure to the sun or excessive heat may cause damage to the unit.
- Do not install the scanner in a humid or dusty place.
- Place the scanner securely on an even, flat surface. Tilted or uneven surfaces may cause mechanical or paper-feeding problems.
- Retain the scanner box and packing materials for shipping purposes.

### 2.1 Installing the Scanner Driver and Cables

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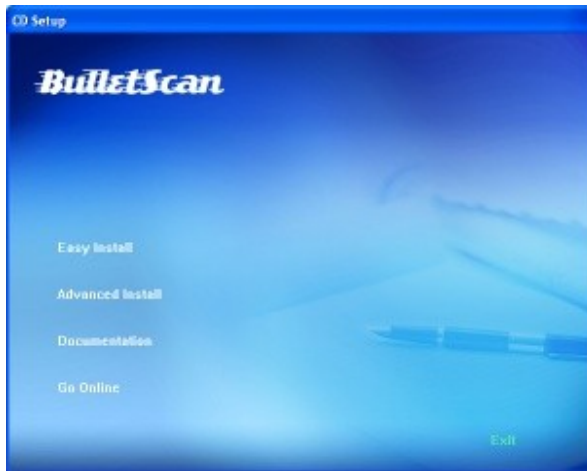
**Note:**

For best results, install the software from the CD before connecting the M80 to your computer. If you have already connected the M80, but not installed the software, simply disconnect it and start installing from the CD.

---

### 2.1.1 Installing the Scanner Driver

1. Place the supplied CD-ROM onto your CD-ROM drive.
2. The software installation screen appears. If not, run "**setup.exe**".



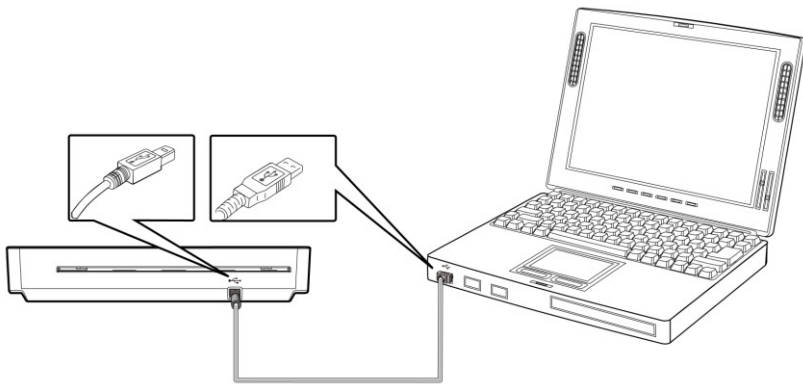
#### Contents on the installation disc:

- **Easy Install:** Click to install all bundled software including scanner driver, BulletScan Manager, NewSoft Presto! PageManager, and NewSoft Presto! Bizcard Reader.
- **Advanced Install:** Choose for a selective installation.
- **Documentation:** Click to view quick install guide, scanner manual, BulletScan Manager manual and other software manual.
- **Go Online:** Click to go online to the Bulletsan.com website.

### 2.1.2 Connecting to Computer

The scanner will get its power from the computer through the USB cable. Use the USB cable that came with the scanner to connect the scanner to the computer.

1. Connect the **small end** of the USB cable to the USB port of your scanner. Connect the **rectangle end** to the USB port of your computer.



2. The computer should detect a new USB device and prompt a **"New Hardware Found"** message.
3. In Windows XP, click the **Next** button to continue. When the XP certification screen appears, click **Continue Anyway** to complete the installation.

In Windows Vista, click the **Recommended** option, and then click **Continue** button to complete the installation.

4. When the **Finish** dialog is prompted, click the **Finish** button.

Click **"View Manual"** to view or print the detailed user manual for the scanner and bundled applications respectively.



## **3. Completing Your First Scan**

### **3.1 Input Document Specifications**

Before using the scanner, please make sure that your paper meets the following specifications:

- Document(s) can range in size from 2.9 by 2.1 inches to 8.5 by 14 inches (Legal).
- Document(s) can range in weight from 13.3 to 32 lbs (50 ~ 120 g/m<sup>2</sup>)
- Plastic ID cards up to 1.25 mm thick
- Document(s) should be square or rectangular and in good condition (not fragile or worn).
- Document(s) should be free of curl, wrinkle, tears, wet ink, or punch holes.
- Document(s) should be free of staples, paper clips, paper sticky notes.

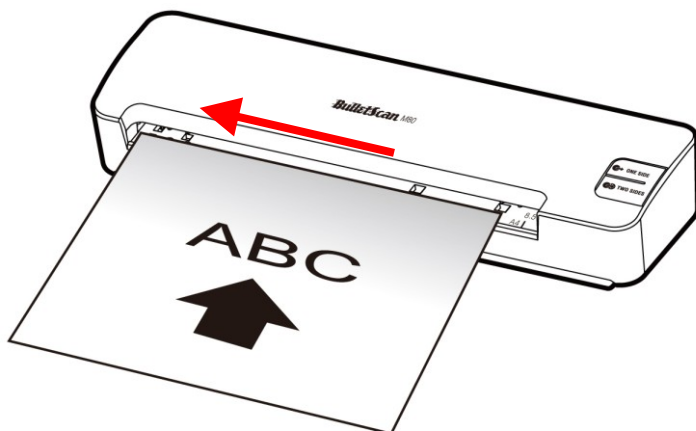
### **3.2 Using the BulletScan Manager**

To use the BulletScan Manager with the M80, simply insert a document and press the “One Side” or “Two Sides” button on the scanner. This will do a one-sided or two-sided scan using Button 1 on the BulletScan Manager software. See the BulletScan Manager manual for more details on how to configure this software.

### 3.2.1 Loading Paper to the Paper Feed Slot

The scanner is a duplex scanner, which means it can scan both sides of the page at the same time. However, the scanner can only scan one page at a time.

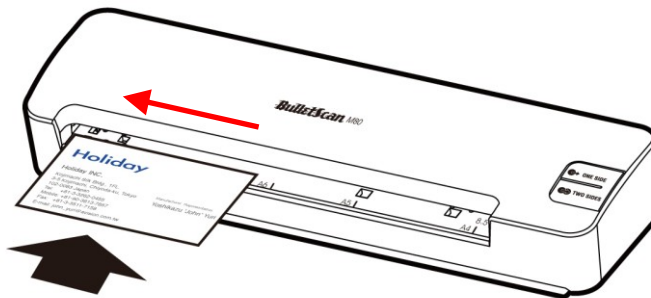
1. When scanning a single sided of the document, insert the document facing up with the top of the page pointing to the paper feed slot. When scanning both sides of the document, the top facing side of the document will be the first image processed.
2. Align the original to the left side of the paper feed slot.





### 3.2.2 Loading A Card to the Paper Feed Slot

1. Place the card face up with the long side parallel to the paper feed slot and make sure the top of the card points to the paper feed slot.



2. Align the original to the left side of the paper feed slot.

---

**Note:**

This scanner is able to scan plastic ID cards up to 1.25 mm (0.05 inch) thick.

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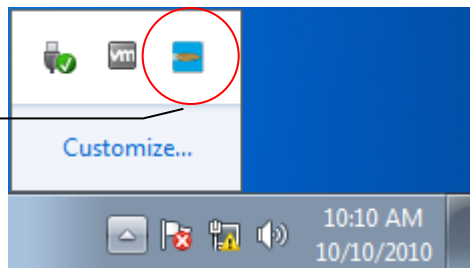
### 3.3 Verifying Your Scanner Installation

Once you've loaded your scanner, you should be able to begin scanning simply by clicking on the BulletScan icon in the system tray and clicking on the destination number.



BulletScan Manager icon  
on Windows XP

BulletScan Manager icon  
on Windows Vista/7



By default, inserting a document and pressing the scan button will give you a PDF in NewSoft Presto! PageManager. For more information on using the BulletScan Manager, please refer to the BulletScan Manager User Manual PDF.

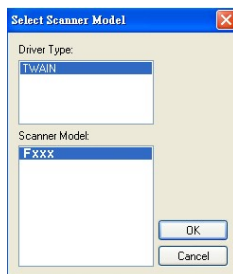
If this doesn't work, you can verify if your scanner installation is correct, iVina provides you a simple image capture program called iVina Capture Tool. With this tool, you can perform simple scans to many image formats and immediately view the results. In addition, you can do use it to do speed tests and other operations

If your scanner is not responding after installation, the following procedure shows you how to verify your scanner installation. If the scanner is not working, please check both ends of the power and USB cables, verify the shipping lock is disengaged, and restart the scanner and computer.

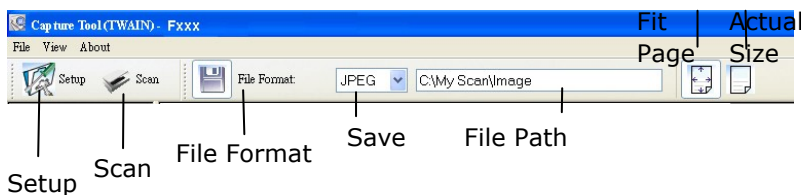
Before you begin, be sure the scanner is on.

1. Select Start>Programs>BulletScan>iVina Capture Tool. If there is nothing in the start menu labeled "BulletScan" you must install the software from the CD.

2. The Select Scanner Model dialog box will be displayed.



3. Select TWAIN (your driver type) and the F200 (scanner model) and click OK. The following iVina Capture Tool dialog box will be displayed.

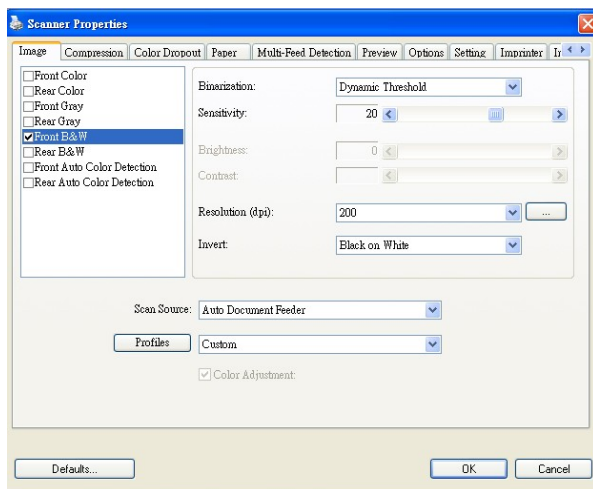



4. Choose your desired file format from the File Format drop down list box. (Default is BMP, other choice includes TIFF, GIF, and JPEG.)
5. Type your desired folder name and file name in the File Path box. (Default is C:\My Scan\Image.)

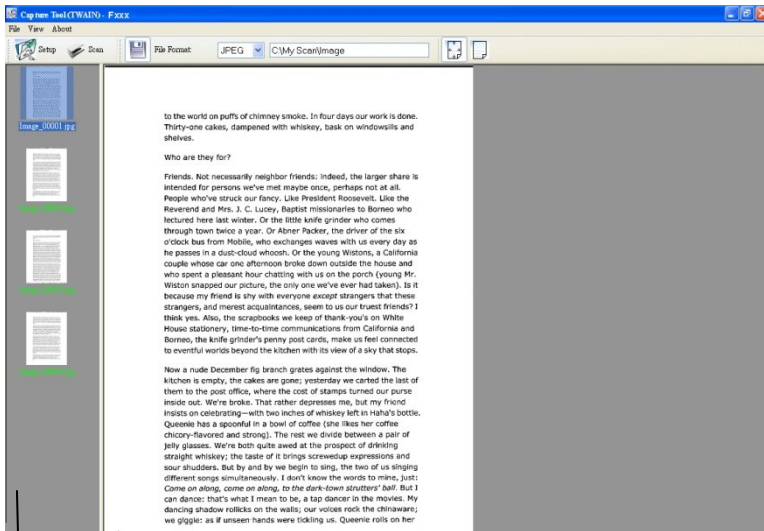
**Note:** If you do not wish to save the scanned image, click the Save button (Floppy Disk icon) as this option is enabled by default. Also, if you disable saving, the thumbnail view will be disabled and you'll only be able to view the last captured image.

6. Click the Setup button (  ) or choose Setup from the File menu to prompt the Scanner Properties dialog box.

Image  
Selection  
Box




7. From the Image Selection Box, choose your desired image type for your scanned image. (Default is Front B&W) If you have a duplex scanner, choose Front and Rear to scan both sides of your document.
8. Click OK to quit the Scanner Properties dialog box. (To learn more details about the Scanner Properties dialog box, please see the subsequent chapter, *Using the Scanner Properties Dialog Box*.)
9. Place your document face down on the document glass or face up in the auto document feeder.
10. In the Scan Validation dialog box, click the Scan button  
 or choose Scan from the File menu.
11. The document will be scanned and displayed in the Scan Validation screen. After the scanned images have been displayed, your scanner installation verification is completed.



Thumbnail View

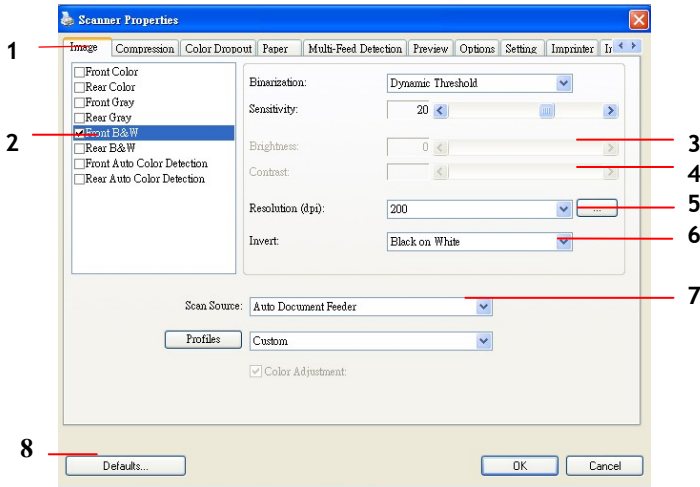
Fit Page View

12. You can view the scanned image in Fit Page (  ) or

Actual Size (100%) button (  ) from the Viewing toolbars at the right side.

13. Click the Close box or Quit from the File menu to exit the Scan Validation Tool.

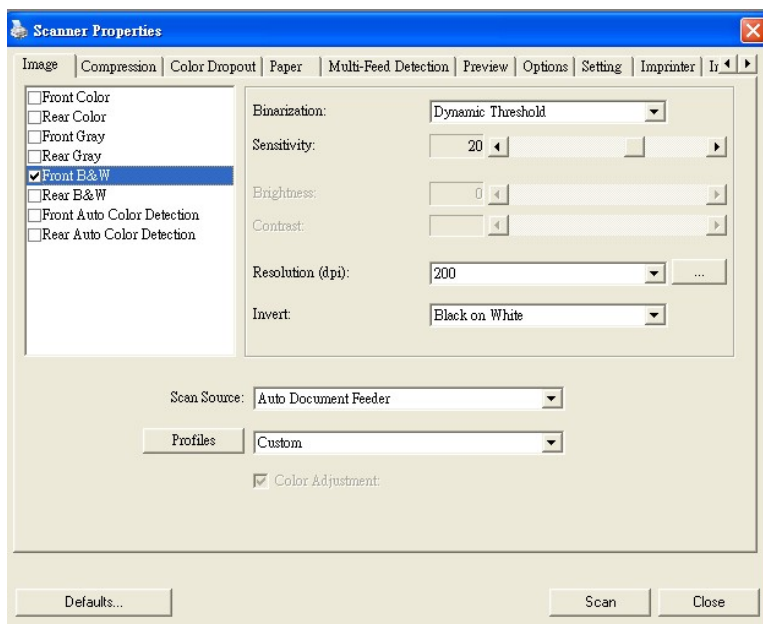
### 3.4 A Glance of the Scanner Properties Dialog Box



<b>1. Tab Options</b>	Choice: Image, Compression, Color Dropout, Paper, Options, Settings, Information.
<b>2. Image Selection Box</b>	Choose your image type and the side of document you wish to scan. Options vary based on type of scanner.
<b>3. Brightness:</b>	Adjust the brightness level from -100 to +100.
<b>4. Contrast</b>	Adjust the contrast level from -100 to +100.
<b>5. Resolution</b>	Determine the quality of the scanned image. The industry standard is 200 dpi.
<b>6. Invert</b>	Reverse the color of your scanned image.
<b>7. Scan Source</b>	<b>Choice:</b> Auto Document Feeder, Flatbed, Flatbed (Book), Automatic (varies due to different scanner model)
<b>8. Defaults</b>	Reset all values on the tabs to the factory default settings.

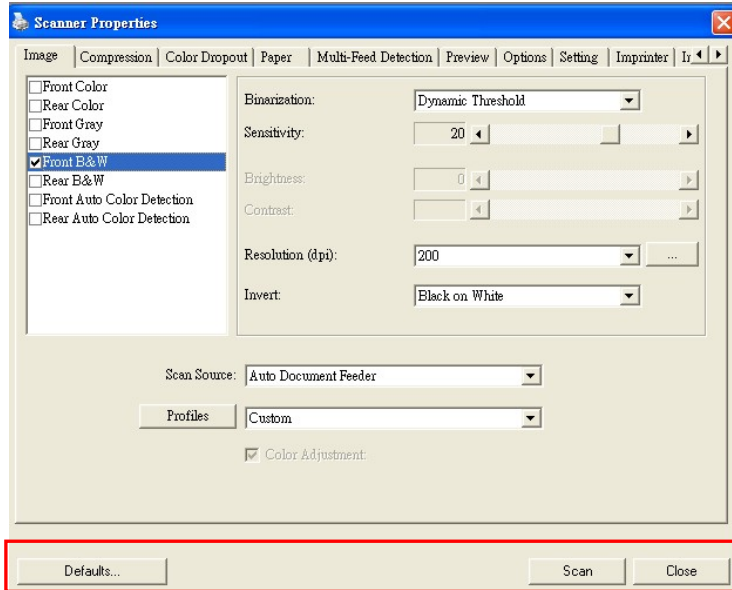
## 4. Using the Scanner Properties Properties Dialog Box

The Scanner Properties dialog box allows you to configure the scanner's settings. It consists of several tabbed windows each of which will be described in this chapter.



**The Scanner Properties dialog box**

## 4.1 Buttons on the Scanner Properties Dialog Box



The buttons on the Scanner Properties dialog box

Buttons	Description
<b>Defaults</b>	Click the <b>Defaults</b> button, the factory default settings will be shown on each tab.
<b>Scan</b>	After all the scan settings are satisfactory, click the <b>Scan</b> button to start scanning your document.
<b>Close</b>	Click the <b>Close</b> button to leave the Scanner Properties dialog box.

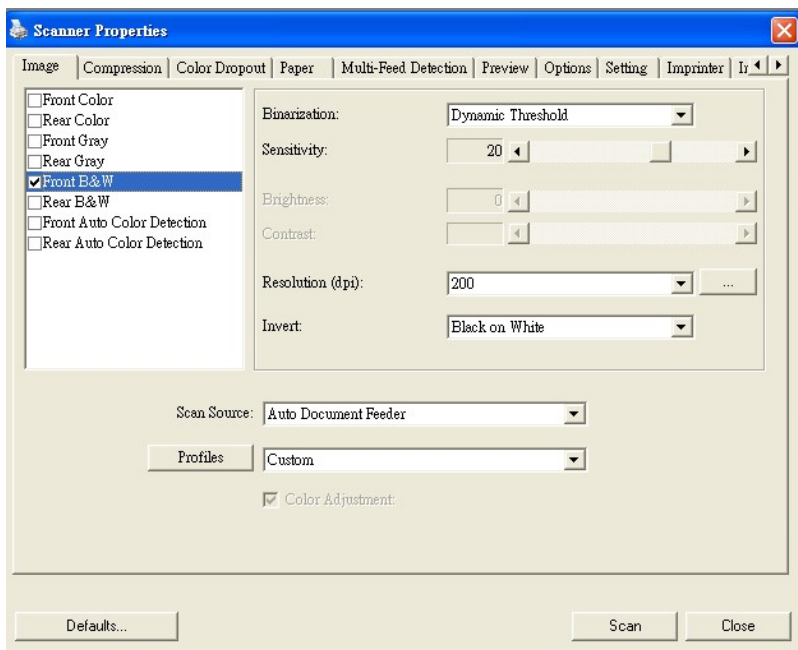


The following table shows the default settings :

Tab name	Default settings
<b>Image</b>	Image : Front B&W Binarization : Dynamic Threshold Resolution : 200 dpi Invert : Blank on White Scan Source : Auto Document Feeder Threshold : None Brightness : None Contrast : None
<b>Compression</b>	None
<b>Color Dropout</b>	None
<b>Paper</b>	Cropping : Automatic Deskew : Yes Orientation : Portrait OverScan : 0.00 Multifeed Detection : None Unit : Inch
<b>Options</b>	Rotation Degrees : None Blank Page Removal : None Edge Fill : White , 0 mm Image Control Option : None
<b>Setting</b>	Enable Energy Saver : Enable, 15 minutes after last scan action Show Scanning Progress : Yes Show Warning Message : Yes Save Settings after Closing : Yes

## 4.2 The Image Tab

The Image tab allows you to choose the front side and (or) the rear side of your document, the type of image, and to set several basic scan settings. Note that except for the resolution, you can set individual scan settings for the front side and the rear side. For example, all settings in the Image tab, Compression tab, Color Dropout tab can be set individually for the front and the rear side. However, the settings in the Paper tab, the Option tab, and the Setting tab have to be set the same for the front and rear side.



**The Image tab dialog box**

## 4.2.1 The Image Selection Box

- ☒ Front Color
- ☒ Rear Color
- ☐ Front Gray
- ☐ Rear Gray
- ☐ Front B&W
- ☐ Rear B&W
- ☐ Front Auto Color Detection
- ☐ Rear Auto Color Detection

The Image Selection box includes the color depth and document side option. If you wish to scan both the front side and the rear side of your color document, you can check both Front Color and Rear Color at the same time.

### Example 1 : Scanning a two-sided color document, both sides in color

<div data-bbox="157 593 393 804" data-label="List-Group"> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Front Color</li> <li><input checked="" type="checkbox"/> Rear Color</li> <li><input type="checkbox"/> Front Gray</li> <li><input type="checkbox"/> Rear Gray</li> <li><input type="checkbox"/> Front B&amp;W</li> <li><input type="checkbox"/> Rear B&amp;W</li> <li><input type="checkbox"/> Front Auto Color Detection</li> <li><input type="checkbox"/> Rear Auto Color Detection</li> </ul> </div> <div data-bbox="145 892 309 956" data-label="Text"> <p>Side/Image Selection</p> </div>	<div data-bbox="441 598 700 885" data-label="Image"> </div> <div data-bbox="441 909 516 941" data-label="Text"> <p>Front</p> </div>	<div data-bbox="723 598 993 885" data-label="Image"> </div> <div data-bbox="723 917 792 949" data-label="Text"> <p>Rear</p> </div>
--	---	--

1

[illegible]

Image Type	Description
<b>Color</b>	Choose Color if you wish to scan a color image for your original in color.
<b>Gray</b>	Choose Gray image if your original contains actual shades of gray.
<b>B&amp;W</b>	Choose B&W if your original contains only text, pencil or ink sketch.

[illegible][illegible]

### Color

## **Front/Rear Auto Color Detection:**

Click to automatically detect and scan the front or the rear page of your color document in color image mode. If your document is in color, the scanner will automatically scan the document into a color image. If your document is non-color, you can choose the output to be either B&W or Gray from the Non-Color Selection option. This option is typically used when you have a mixture of color and non-color document.

**Note:** If you enable Auto Color Detection for either side, it will be enabled for both sides if you are scanning in duplex.

## **Sensitivity of Auto Color Detection**

If your documents contain primarily B&W text and small amount of light or pale colors and you do not wish them to be recognized as color image to save the file size, you can reduce the sensitivity value by moving the bar to the left to let these images to be detected as B&W. The value ranges from 1 to 30. The default is 20.

## 4.2.2 Other Image Options

**Binarization** This is the process of converting a grayscale or color image to a bi-tonal or Black and White image. There are several different methods of performing this conversion. **Options: Dynamic Threshold, Fixed Processing, Halftone 1~5, Error Diffusion.**

**Dynamic Threshold:** Selecting **Dynamic Threshold** allows the scanner to dynamically evaluate each document to determine the optimal threshold value to produce the highest quality image. This is used for scanning mixed documents containing faint text, shaded backgrounds, or color backgrounds with a single setting. If Dynamic Threshold is selected, Threshold, Brightness, and Contrast are not available.

### **Sensitivity of Dynamic Threshold**

Occasionally your scanned image may contain small dots or speckles. To remove these spots, increase the sensitivity value by moving the bar to the right. The value ranges from 1 to 30. The default is 20.

**Fixed Processing:** Used for black-and-white and other high contrast documents. A single level is set to determine the black-and-white transition. The threshold is programmable over the entire density range. **Fixed Processing** sets Contrast to 0. If **Fixed Processing** is selected, Contrast is not available.

**Halftone:** In addition to the black and white display, Halftone can present a somehow gray shade of image by using different size of dots. Halftone image looks like the picture we have seen in the newspaper. **Options include Halftone 1, Halftone 2, Halftone 3, Halftone 4, Halftone 5.**

**Error Diffusion:** Error Diffusion is a type of Halftone. Error Diffusion is a compromise between giving good image texture and makes text in images more readable than Halftone.



**Halftone Image**



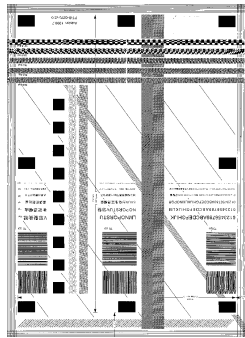
## Error Diffusion Image



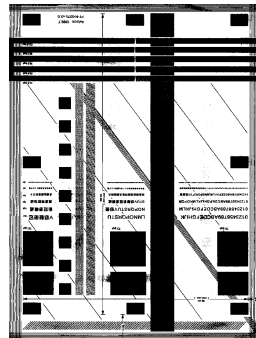
## Threshold

Used to convert a grayscale image to a Black & White image. The value ranges from 0 to 255. A low threshold value produces a lighter image, and can be used to subdue backgrounds and subtle, unneeded information. A high threshold value produces a darker image, and can be used to help pick up faint images.

Adjust the threshold setting by dragging the Threshold sliding bar to the left or right to achieve the desired threshold setting.



**200 dpi,  
Threshold:80,  
Brightness: 0**



**200 dpi,  
Threshold:170,  
Brightness: 0**

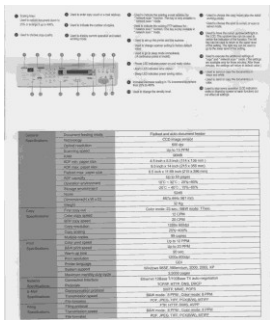
## Gray

### **Document Type: Normal, Photo, Document**

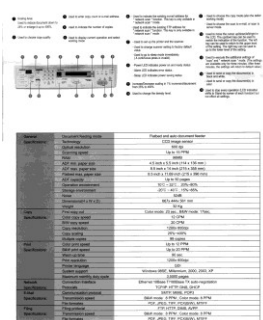
Three options for document type are provided when you choose Gray as the color depth for your scanned document. Choice: Normal, Photo, Document.

- **Document:** Choose Document if your original contains pure text or a mixture of text and graphic since it is an optimal setting for regular business document. When using Document, only Threshold can be adjusted.
- **Photo:** Choose Photo if your original is a photo or similar to reproduce your photo in vivid grayscale image. When using Photo, Threshold and Contrast are locked.
- **Normal:** When using **Normal**, Threshold, Brightness, and Contrast can be adjusted.

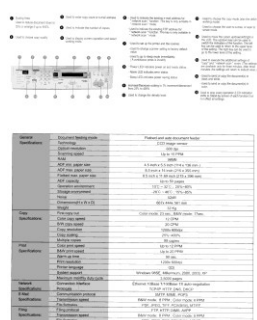
**Threshold:** The value ranges from 0 to 255. The default is 230. A low threshold value produces a lighter image, and can be used to subdue backgrounds and subtle, unneeded information. A high threshold value produces a darker image, and can be used to help pick up faint images. Adjust the threshold setting by dragging the **Threshold** sliding bar to the left or right to achieve the desired threshold setting.



**Normal**



**Photo**



**Document  
(Threshold: 230)**



**Normal**



**Photo**



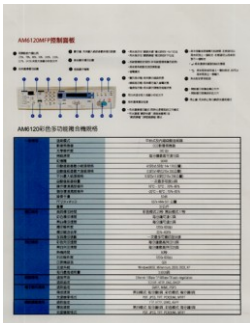
**Document  
(Threshold: 230)**

## Brightness

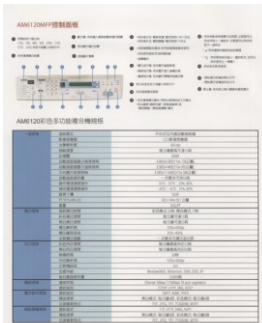
Adjusts the lightness or darkness of an image. The higher the value, the brighter the image. Drag the slider to the right or left to increase or decrease the brightness. The range is from -100 to +100.

## Contrast

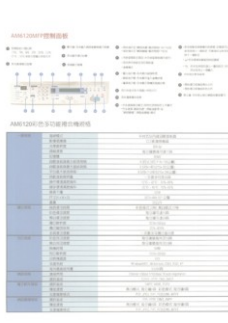
Adjusts the range between the darkest and the lightest shades in the image. The higher the contrast, the bigger the different grayscale. Drag the slider to the right or left to increase or decrease the contrast. The range is from -100 to +100.



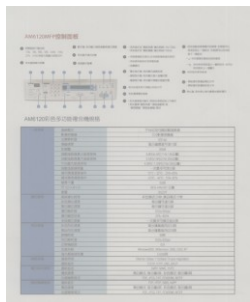
Brightness: -50



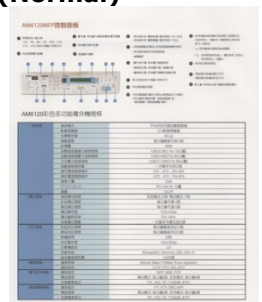
Brightness: 0  
(Normal)



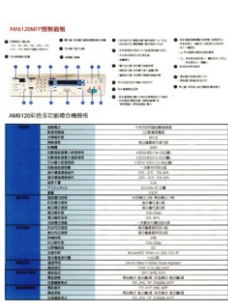
Brightness: +50



Contrast: -50



Contrast: 0  
(Normal)



Contrast: +50

## Resolution

Resolution is the value that controls how much information is captured when the scan is performed. A higher resolution will capture more information and increase the file size, trading off performance for quality. Most business documents are best saved in 200 or 300 DPI (Dots Per Inch) depending on the size and quality of the text. For reference, an letter size color image scanned at 300 dpi at in color consumes about 25 MB of disk space when uncompressed. A higher resolution (over 400 dpi) is only recommended when you need to scan a very small area.

Choose a resolution value from the drop down list. The default value is 200 dpi. Available resolutions are 75, 100, 150, 200,300, 400 and 600. Or you may manually set the resolution by clicking the button labeled [...] next to the drop down list and enter your desired value, pressing the Add button to include it in the drop down list.



**Resolution: 75 dpi**



**Resolution: 150 dpi**

**Invert** Reverses the brightness and the colors in the image. The default setting is Black on a White background. Reverse mode is White on a Black background. For color images, each pixel will be changed into its complementary color if it is Inverted.

**"I am not worthy to have you enter my**

that is God, I beg all my brothers - those who work manually, clerics and lay brothers  
ards being humble in all things; not to glorify  
r to become interiorly proud because of good w  
sometimes says or does in them or through t  
ord: "Do not rejoice... in the fact that the de  
10:20) Let us be firmly convinced of the fact

**Black on White**

**"I am not worthy to have you enter my**

that is God, I beg all my brothers - those who work manually, clerics and lay brothers  
ards being humble in all things; not to glorify  
r to become interiorly proud because of good w  
sometimes says or does in them or through t  
ord: "Do not rejoice... in the fact that the de  
10:20) Let us be firmly convinced of the fact

**White on Black**

**Scan  
Source**

**Choice:**

- **Auto Document Feeder:** Used to scan multiple pages.
- **Merge Two Sides into One Image:**  
When scanning, you can scan an 11"x17" size document using this innovative method. To do this, fold your 11"x17" size document in half to 8.5"x11", and then load the paper in the front tray. Choose Merge Two Sides from the Scan Source option and then the scanner is able to scan both sides of your document and merge the two sides into a single output image.

When you select Merge Two Sides into One Image, the Cropping or Multi-feed function will be disabled.

## **Color Matching**

The purpose of Color Matching is getting the accurate color. This option uses the default parameters (ICC profile) to adjust the colors of the image.



**Normal**



**After Color Matching**

### **4.2.3 Scanning color images**

The following options are available for scanning color images.

- Brightness
- Contrast
- Resolution
- Invert



#### **4.2.4 Scanning grayscale images**

The following options are available for scanning gray images.

- Brightness
- Contrast
- Resolution
- Invert

#### **4.2.5 Scanning B&W images**

The following options are available for scanning B&W images.

- Binarization (Dynamic Threshold)
- Resolution
- Invert

Or

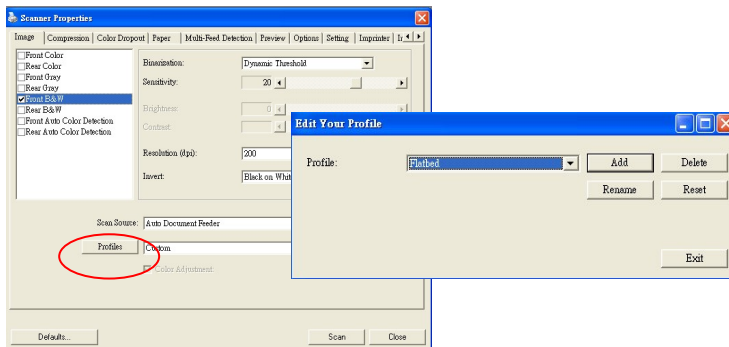
- Binarization (Fix Processing)
- Threshold
- Brightness
- Resolution
- Invert

## 4.2.6 Editing Profiles

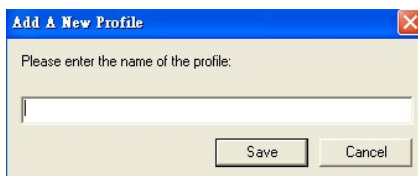
The Scanner Properties dialog box allows you to change and save your frequently used scan settings into a profile. You can edit these profiles by renaming or deleting them.

### To add a new profile,

1. Customize your settings. (For example, change your resolution, image type, cropping method, scan size, or other scan settings.)
2. Click the Image tab and then choose "Profiles" to prompt the "Edit Your Profile" dialog box.



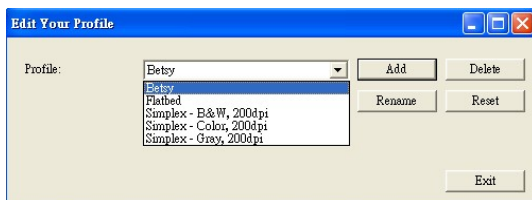
3. Click "Add" to enter the name of the profile and then choose "Save".



4. The new profile will be saved and shown in the "Profiles" dropdown list box.

## To load a profile,

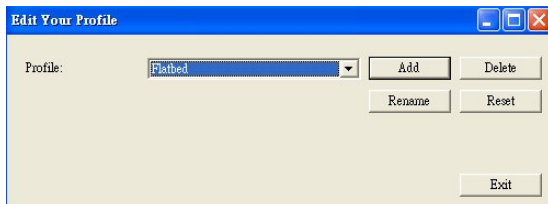
1. From the Image tab dialog box, choose your favorable profile from the "Profiles" dropdown list box.



2. Your favorable profile will be immediately loaded and displayed on Scanner Properties dialog box.

## To delete a profile,

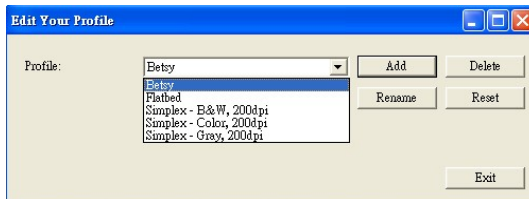
1. From the Image tab dialog box, click "Profiles" to prompt the Edit Your Profile dialog box.



2. Choose the profile you want to delete from the dropdown list box.
3. Click "Delete". A Confirm message "Are you sure you want to delete this profile?" is prompted.
4. Choose "Yes" to delete or "Cancel" to quit.

## To rename a profile,

1. From the Image tab dialog box, click “Profiles” to prompt the Edit Your Profile dialog box.



2. Choose the profile you want to rename from the dropdown list box and then click the Rename button.
3. Enter new name for the profile.



4. Choose “Save” to save the new profile or “Cancel” to quit.

### **Note:**

The preset default profiles includes Simplex-B&W, 200 dpi, Simplex-Gray, 200 dpi, Simplex-Color, 200 dpi, Duplex-B&W, 200 dpi, Duplex-Gray, 200 dpi, Duplex-Color, 200 dpi.

### 4.3 The Compression Tab

The Compression tab allows you to compress your scanned image and choose the level of compression. Bi-tonal (Black and White) images are normally compressed using CCITT Group 4 (G4) standard. Color and grayscale images are often compressed using JPEG compression. Move the **JPEG Quality** slider to the right or left to increase or decrease the level of compression. Note the greater the compression level, the lower image quality. Default is 50%.

Note that when scanning from certain applications, not all compression modes are supported. If the application does not support the type of compression format, typically you will see an error or a black image.

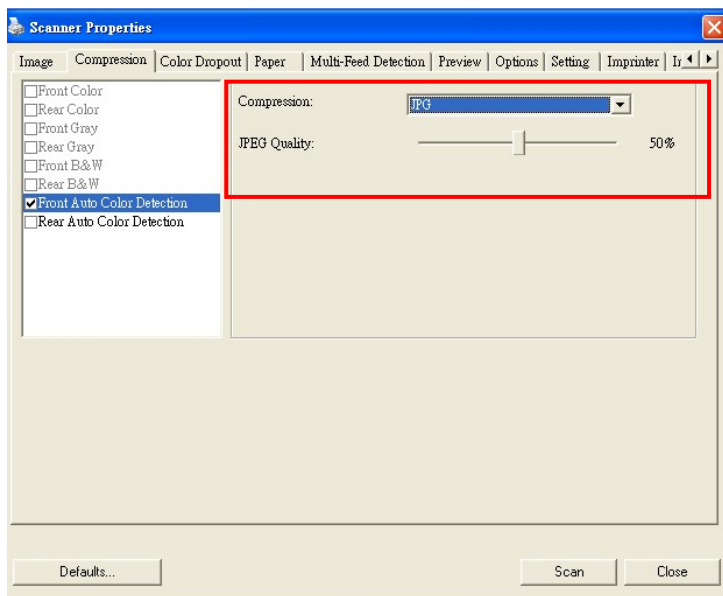
JPEG (Joint Photographic Editor Group). This group developed and lent their name to a file compression standard for color and grayscale images that is widely used by scanners, and software applications. On Microsoft Windows-based systems, a file with the extension .jpg has normally been compressed using this standard.

For scanning color or gray images, the following compressions are available:

- None
- JPEG

For scanning B&W images, the following compressions are available:

- None
- G4



**The Compression tab dialog box**

## **4.4 The Color Dropout Tab**

### **4.4.1 Color Dropout Selection**

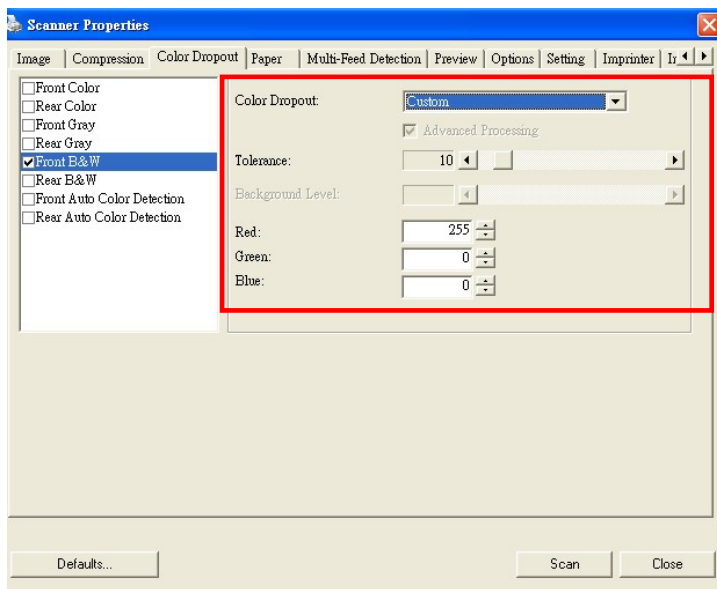
Color Dropout is a special type of image processing designed to improve OCR results by removing specific types of background color content. Typically this is used in conjunction with specially designed forms that have colored boxes or checkboxes that people fill in. Using dropout allows you to remove these specially colored boxes from the image and provides you with better OCR results. It can also be used to remove a specific background color if it is causing a lot of noisy speckling.

From the dropdown menu, you can select any of the standard RGB color channels to be removed, or Custom to allow you to specify your desired color to be removed by entering its RGB (Red, Green, and Blue) value respectively.

Tolerance: Specify the allowable color range to be removed for the color you selected. Specified range: 1 ~ 100

The larger the numeric value, the wider the color dropout range is.

Note that this function is only for outputting black & white or gray images.



**The Color Dropout dialog box**



## 4.4.2 Other Color Dropout Options

**Advanced Processing** provides two options that can adjust your scanned image in the best optimal result.

### Filter Threshold

This value is used to determine the color which will be dropped out. A lower value will drop more of the selected color out, while a higher value will leave more of the selected color in.

### Background Level

The pixel which is higher than the background value will be adjusted to the lightest point. Adjust the value for both the Filter Threshold and Background Level to produce the best optimal result.

**Example, slightly adjusting the background value makes your text more clear.**

AM6120彩色多功能複合機規格		
一般規格	產品模式	非特式及內建自動感應器
	外觀及構造	112 毫米厚機身
	主要規格	600 dpi
	印刷速度	每分鐘最高可達 10 頁
	公制單位	100%
	自動及非自動印刷速度	4 英寸 x 5.5 英寸 100 頁/分鐘
	自動及非自動印刷速度	5 英寸 x 6.5 英寸 100 頁/分鐘
	自動及非自動印刷速度	8 英寸 x 10.5 英寸 100 頁/分鐘
	自動及非自動印刷速度	一頁最多可達 10 頁
	自動及非自動印刷速度	一頁最多可達 10 頁
基本規格	紙張厚度及重量	100% - 40% 100% 40%
	紙張厚度及重量	100% - 40% 100% 40%
	紙張厚度及重量	100%
	紙張厚度及重量	600 600 100 頁/分鐘
	紙張厚度及重量	100%
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
其他規格	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量
	紙張厚度及重量	紙張厚度及重量

**Original**

AM6120彩色多功能複合機規格

一般規格	規格項目	規格說明
	產品形式	台式式及內嵌式雙面複合機
	影像感應器	CCD影像感應器
	光學解像度	600 dpi
	影像密度	每方厘米可達 1/25 點
	配置槽	RAM
	印數量及複數式紙張規格	4,320 x 3,216 (1/4 1/8 1/16 1/32 點)
	印數量及複數式紙張規格	4,320 x 4,800 (1/4 1/8 1/16 1/32 點)
	印數量及複數式紙張規格	8,640 x 11,520 (1/4 1/8 1/16 1/32 點)
	印數量及複數式紙張規格	一、複數式可選 1/8 點
	操作溫度及濕度條件	10°C ~ 35°C 20% ~ 80%
	儲存溫度及濕度條件	15°C ~ 45°C 10% ~ 85%
	最大卡量	1000
複印規格	印尺寸及 A/D	600 x 480 x 90 公釐
	速度	100 fpm
	彩色複印速度	彩色複式 1/4 秒、黑白複式 1/4 秒
	彩色複印速度	每分鐘可達 1 頁
	彩色複印速度	每分鐘可達 1 頁
	複印放大率	100% ~ 600%
	複印縮小率	25% ~ 40%
列印規格	彩色印片速度	一、彩色印片可選 1/8 秒
	彩色印片速度	每分鐘可達 1/10 頁
	彩色印片速度	每分鐘可達 1/10 頁
	印機組件	1000
	印片溫度	100% ~ 600%
	印片溫度	25%
	印片溫度	Windows 95, Windows 98, Windows 2000, XP
網路規格	網路規格	1000 Mbps 10/100 Mbps 10/100 Mbps
	網路規格	1000 Mbps 10/100 Mbps 10/100 Mbps
電子郵件規格	電子郵件	SMTP, POP3, IMAP
	電子郵件	無印模式、每分鐘 1 頁、彩色複式、每分鐘 1 頁
網路傳真規格	網路傳真	PDF, PDF, PDF, PDF, PDF
	網路傳真	無印模式、每分鐘 1 頁、彩色複式、每分鐘 1 頁

**Remove Blue, Threshold: 20, Background: 255**

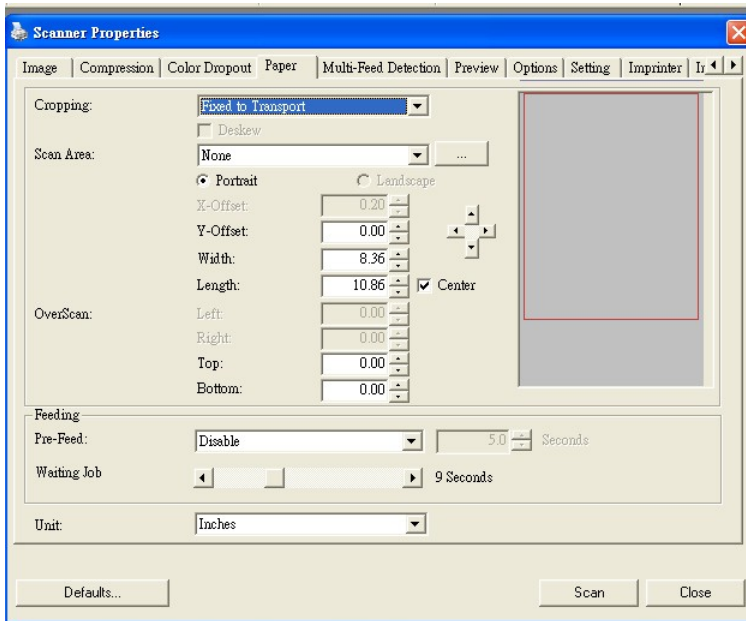
AM6120彩色多功能複合機規格

一般規格	規格項目	規格說明
	產品形式	台式式及內嵌式雙面複合機
	影像感應器	CCD影像感應器
	光學解像度	600 dpi
	影像密度	每方厘米可達 1/25 點
	配置槽	RAM
	印數量及複數式紙張規格	4,320 x 3,216 (1/4 1/8 1/16 1/32 點)
	印數量及複數式紙張規格	4,320 x 4,800 (1/4 1/8 1/16 1/32 點)
	印數量及複數式紙張規格	8,640 x 11,520 (1/4 1/8 1/16 1/32 點)
	印數量及複數式紙張規格	一、複數式可選 1/8 點
	操作溫度及濕度條件	10°C ~ 35°C 20% ~ 80%
	儲存溫度及濕度條件	15°C ~ 45°C 10% ~ 85%
	最大卡量	1000
複印規格	印尺寸及 A/D	600 x 480 x 90 公釐
	速度	100 fpm
	彩色複印速度	彩色複式 1/4 秒、黑白複式 1/4 秒
	彩色複印速度	每分鐘可達 1 頁
	彩色複印速度	每分鐘可達 1 頁
	複印放大率	100% ~ 600%
	複印縮小率	25% ~ 40%
列印規格	彩色印片速度	一、彩色印片可選 1/8 秒
	彩色印片速度	每分鐘可達 1/10 頁
	彩色印片速度	每分鐘可達 1/10 頁
	印機組件	1000
	印片溫度	100% ~ 600%
	印片溫度	25%
	印片溫度	Windows 95, Windows 98, Windows 2000, XP
網路規格	網路規格	1000 Mbps 10/100 Mbps 10/100 Mbps
	網路規格	1000 Mbps 10/100 Mbps 10/100 Mbps
電子郵件規格	電子郵件	SMTP, POP3, IMAP
	電子郵件	無印模式、每分鐘 1 頁、彩色複式、每分鐘 1 頁
網路傳真規格	網路傳真	PDF, PDF, PDF, PDF, PDF
	網路傳真	無印模式、每分鐘 1 頁、彩色複式、每分鐘 1 頁

**Remove Blue, Threshold: 20, Background Level: 210**

## 4.5 The Paper Tab

The Paper tab allows you to define values relating to image output (i.e., Auto Crop or not, Scan Area, OverScan).



**The Paper tab dialog box**

### 4.5.1 Cropping

Cropping allows you to capture a portion of the document being scanned. **Choice: Automatic, Fixed to Transport, EOP (End of Page) Detection.**

Options	Description
<b>Automatic</b>	Automatic adjusts the cropping window according to different document sizes. Use this option for batches of mixed-sized documents.
<b>Fixed to Transport</b>	This feature allows you to define the area or zone to be imaged. Use for batches of same-sized documents. If you select this option, you can use the arrow keys to define the x and y offset values, width and length to redefine your scanned area. The Display window will show image placement as you change the values.
<b>EOP (End of Page) Detection</b>	This feature allows you to define the area or zone to be imaged. Use for batches of same-width but different length documents. If you select this option, you can use the arrow keys to define the x and y offset values, width and length to redefine your scanned area. The Display window will show image placement as you change the values.

The following options are only available when **Fixed to Transport** is selected.

- **X-Offset** — the distance from the left end of the scanner to the left edge of the scanning area.
- **Y-Offset** — the position from the top end of the document to the top end of the scanning area.
- **Width** — the width of the scanning area.
- **Length** — the length of the scanning area.
- **Center:** automatically calculates the x-offset for center-fed feeding based upon document size selected.



- — move the scan area by click the arrow key on the cross sign while retain the scan size. View the result from the Display window.

## 4.5.2 Other Paper Selection

### Deskew

Use this option to automatically deskew (straighten) a document.



Note: If the skew angle is too great, some of the image may be cut off.

### Scan Area

Choose your desired paper size with the drop-down list box. Or you may select a custom paper size by clicking the **Scan Area** box and then click **Add** to include in the choice.

**Choice:** None, US Letter- 8.5"x 11", US Legal – 8.5" x 14", ISO A4 – 21 x 29.7 cm, ISO A5 – 14.8 x 21 cm, ISO A6 – 10.5 x 14.8cm, ISO A7 – 7.4 x 10/5 cm, ISO B5 – 17.6 x 25 cm, ISO B6 – 12.5 x 17.6 cm, ISO B7 – 8.8 x 12.5 cm, JIS B5 – 18.2 x 25.7 cm, JIS B6 – 12.8 x 18.2 cm, JIS B7 – 9.1 x 12.8 cm, Scanner Maximum, Long Page.

### Long Page:

When you need to scan documents whose length exceeds scanner maximum, please choose Long Page. Note if Long Page is selected, the Multi-Feed Detection will not be available. Options: Unknown Length, Enter Length (Note: This option varies due to type of scanner.)

Choose "Unknown Length" if you have a batch of long page document with unknown length. Choose "Enter Length" to enter the length and width of your documents or your desired scan size on documents. This is useful when you have a batch of documents with the same scan size or a batch of same-sized documents.

### **OverScan**

Overscan allows you to add a specific margin at top and bottom or right and left (Options vary based on the type of scanner) of the edge of the image. This is used to reduce possible corner clipping on the skewed images and often applied to a batch of skewed document to be scanned in the auto document feeder. Select a value between 0 and +5 mm. Note the overscan result will not be shown in the Display window and that the availability of the function varies based on type of scanner.

### **Pre-Feed**

Choice: Enable, Disable. If enable is selected, you can set the amount of time the scanner starts pre-feeding your paper after your documents has been loaded into the feeder. The default is disable.

### **Transport Timeout**

Set the amount of time the scanner will wait and then automatically continue to scan after the first scan job is completed. If you have many separate documents that need to be scanned at the same scan settings, this feature is especially useful. The default is 0. The value ranges from 0 to 30 seconds.

---

#### **Note:**

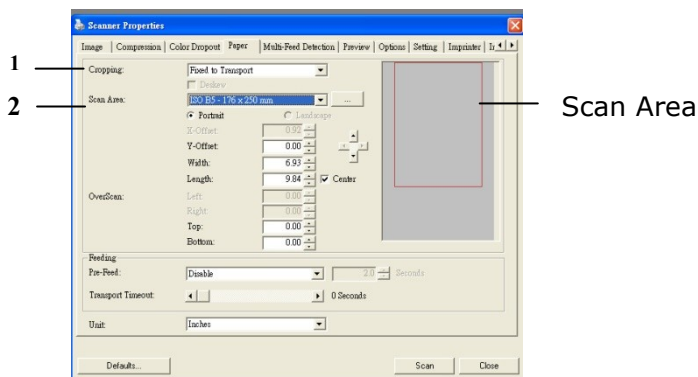
- 1 Within the specified timeout period, if you load your document to the feeder, the scanner resumes scanning automatically.
-

### 4.5.3 Multimode cropping

This feature provides flexibility if you are performing a scan that outputs in a more than one mode (B&W, Gray, or Color); you can assign different crop areas on your documents for each color mode. For example, there are applications which require you to store the entire form in B&W and a part of the document in color to save storage space. This is useful for documents where a photograph, or signature appears in a consistent area on the document such as resumes, and so on.

The following directions describes how to scan the entire document in B&W and keep a small portion of the document (picture) in color.

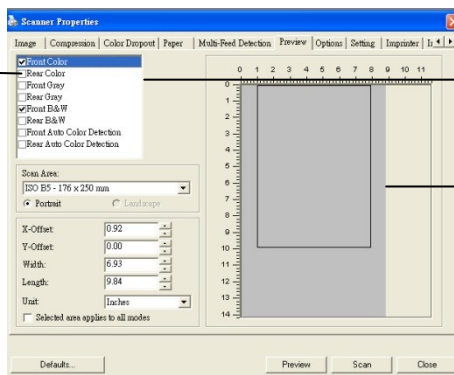
1. On the Paper tab, choose "Relative to Document" or "Fixed to Transport" from the Cropping option.
2. Choose your scan size from the Scan Area option. The selected scan size will be displayed in a red rectangular box. This is also the scan size of your entire document. (If you have not chosen a scan area and leave the selection as None, then the default area will be the scanner's maximum.)



3. Click the Preview tab to display the Preview window. A black rectangular box appears to indicate the max. scan size you have just selected.



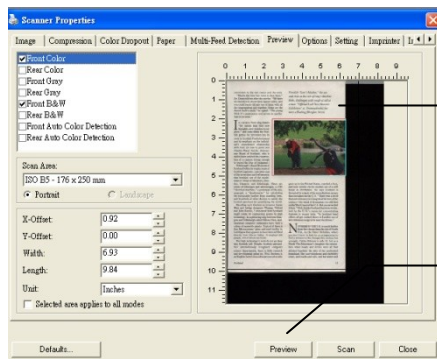
The Image Selection Box



The selected image

A black rectangular box

4. Click the Preview button to view the entire image in low resolution to correctly crop your relative scan area.



The Preview Image

The Preview Button

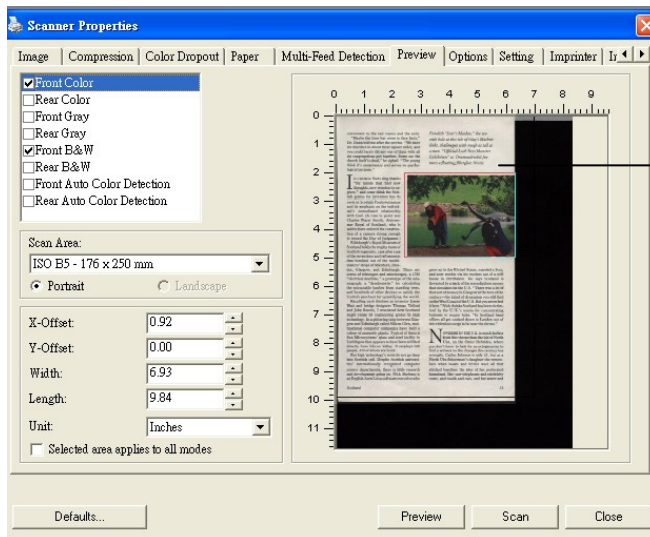
5. Select the image type from the Image Selection box. The selected image will appear in highlighted color. (For example, Front Color)
6. Place your cursor on the Preview window and click your left mouse button. A cross sign will appear as illustrated. Create your relative scan size diagonally by dragging the left mouse button to your preferable size. The selected area will appear in a red box as illustrated.



## 4.6 The Preview Tab

The Preview tab allows you to preview (a low-resolution scan) your image before the actual scan. This preview image lets you manually select your scan area. You can choose your scan area by the “Scan Area” drop down list box or placing your cursor on the Display window and dragging it diagonally on the Display window. Then, a red rectangle box will appear to indicate the selected area.

Note: If you choose “Automatic Cropping” on the “Paper Tab”, then selecting a scan area on the Preview tab is disabled.

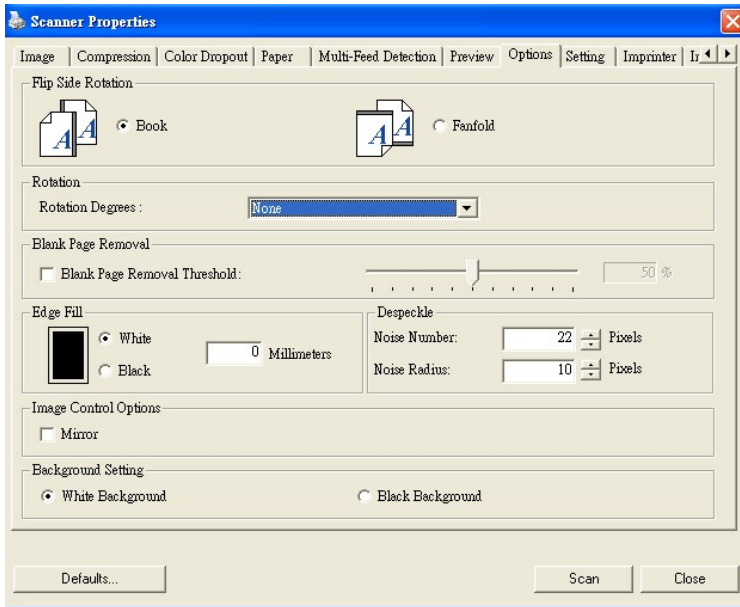


The Display Window

### The Preview Tab

## 4.7 The Options Tab

The Options tab allows you to set following additional image processing settings.



**The Option tab dialog box**

## Flip Side Rotation

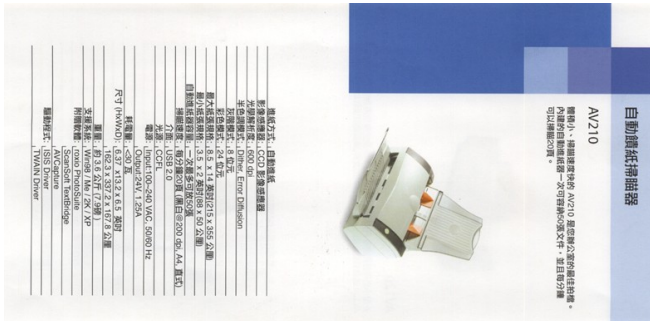
Select "fanfold" to rotate the image of the reverse side to 180 degrees.

This is applied to double-sided document which are viewed in portrait are sometime fed into the scanner in landscape or vice versa.

**Choice: Book, Fanfold.**

If "Book" is selected, the image of the reverse side will not be rotated.

The following illustration shows the documents which should be viewed in portrait are fed into the scanner in landscape



## Rotate Image

Choose the rotation angle from the drop down list if you wish to rotate your scanned image.

**Choice: None, 90°CW(clockwise), 90°CCW(counter clockwise), 180°, Auto based on contents, Auto rotate every even page.**

1 2 3

**Original**

1  
2  
3

**Rotate 90°CW**

1  
2  
3

**Rotate 90°CCW**

1 2 3

**Rotate 180°**

**Auto based on contents:** When **Auto based on contents** is selected, images can be rotated to their proper orientations based on their text contents.

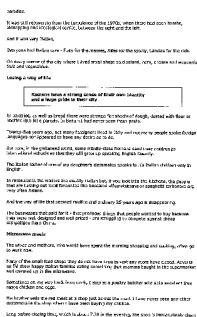
### **Auto rotate every even page:**

Automatically rotate 180° on every even page. This is especially useful when you scan the inside pages from a book. As a result, if you choose "Flatbed (book)" from the "Scan Source" option, "auto rotate every even page" will be selected as default.

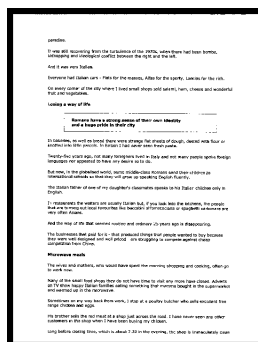
## Edge Fill

Check if you wish to automatically remove blank pages and move the slider to the left or right to your desired threshold.

Check White or Black if you wish to add white or black edge on the border of your scanned image. Enter the value from 0 to 5 mm. Default value is 0.



## Original



**Edge Fill: 5mm (Black)**

**Image  
Control  
Option**

Check the Mirror box if you wish to reverse the right and left side of your image.



**Original**



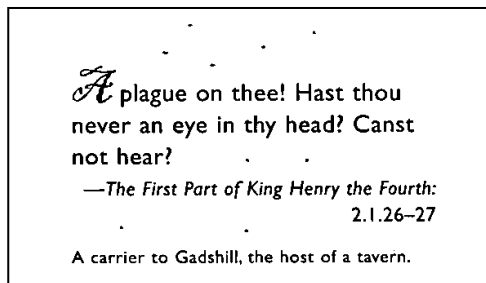
**The Mirror Effect**



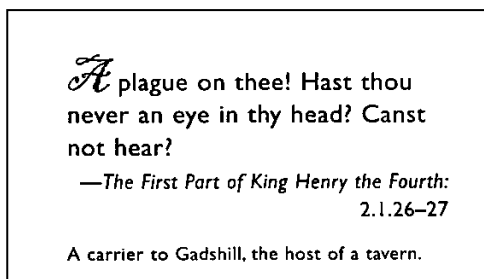
## Despeckle

Occasionally small dots or specks appear in the background of a scanned image. Remove unwanted speckles provides a cleaner image for OCR (Optical Character Recognition) processing, and also helps to reduce compressed file size.

Define the speckles (also known as image noise) you wish to remove by specifying its number (size) and radius (range). The measuring unit is pixel. The higher the number, the more speckles will be removed.



Before Despeckle  
(noise number:0, noise radius:1)



After Despeckle  
(noise number:22, noise radius:10)

---

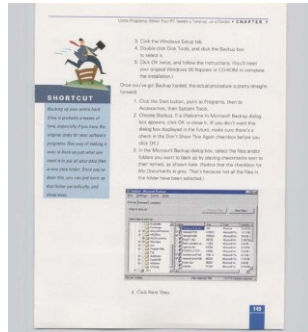
### Note:

- The function is only for Black and White images.
-

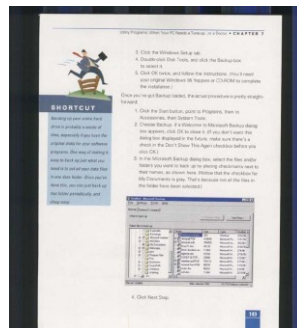
## Background Setting

This option allows you to set your scan background.

**Choice: White Background, Black Background.**



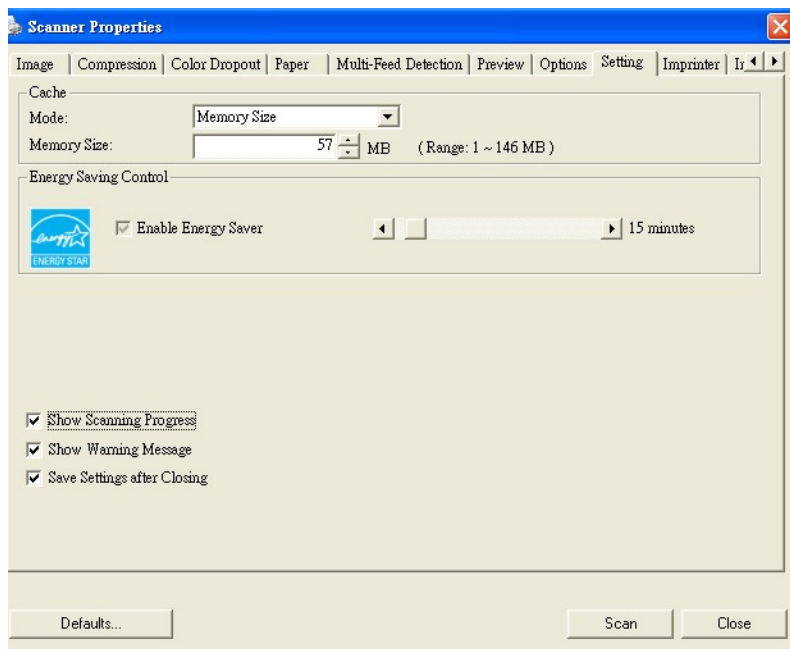
White Background



Black Background

## 4.8 The Setting Tab

The Setting tab allows you to set the following settings:



**The Setting tab dialog box**

### **Energy Saving Control**

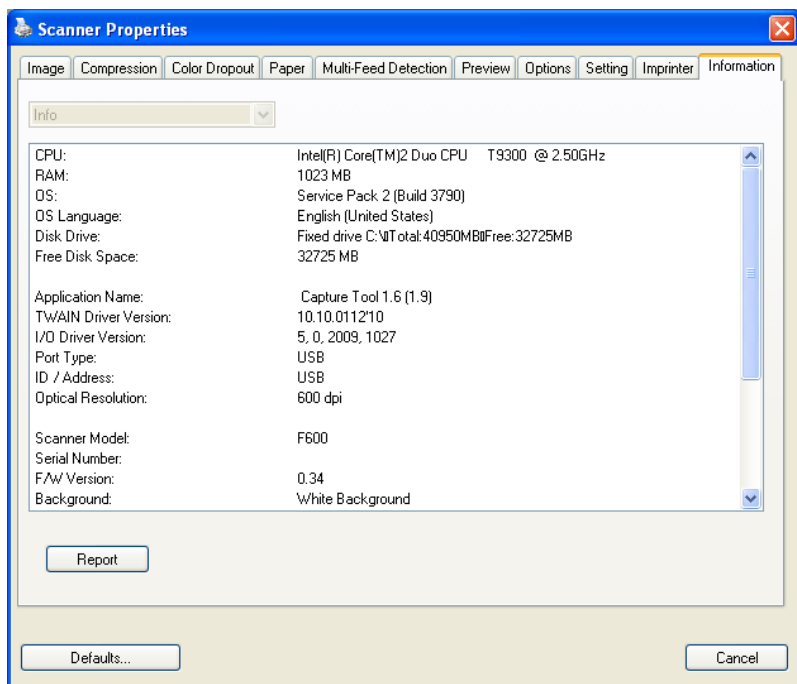
Check the **Enable Energy Saver** box and move the slider to the right to set the amount of time to start the energy saver after your last action. The range is from 1 to 240 minutes. The default is 15 minutes.

<b>Cache</b>	<p><b>Mode: None, Page Number, Memory Size.</b></p> <p>This option allows you to assign a specified memory size from the available RAM to process the image data. By specifying a smaller memory size, you can free more memory for other applications you are running. By specifying a larger memory size, you can have more memory to process the image data especially when you have a large amount of documents needed to be scanned.</p> <p>You can also specify your memory size by the page number. For your information, an A4 color document scanning at 300 dpi consumes approximates 24MB.</p> <p><b>Image Count</b></p> <p>When the selected cache mode is “none”, the image count option allows you to assign number of pages you need to scan. For example, if you wish to scan the first two pages, simply move the page slider to 2, and the scan action will be stopped when the scanning of the first two pages have been completed.</p>
--------------	--

<b>Show Scanning Progress</b>	Check and the scanning progress bar will be shown during scanning.
<b>Show Warning Message</b>	Check to show the warning messages such as "ADF pad count exceeds 50,000 scans (the number varies based on type of scanner). Please replace the ADF pad and reset the pad count."
<b>Save Settings after Closing</b>	Check to save your scanner properties settings after leaving the dialog box. Next time when you open the Scanner Properties dialog box, the previously saved settings will be shown.

## 4.9 The Information Tab

The Information tab displays the following system and scanner information.



**The Information tab dialog box**

### The "Report" button :

If you encounter any error message while using the scanner, click the Report button. A report.txt file (C:\M80) will be generated. Please send this file to the technical support agent for trouble shooting.

# 5. Using the Buttons

## 5.1 The BulletScan Manager

The buttons on the scanner are controlled by the BulletScan Manager. It is installed by default from the CD when you use the Easy Installation mode, and is selected by default when choosing the Advanced Installation mode.

The BulletScan Manager provides you with an easy way to scan your document and then link the scanned image to your designated software application. All this can be done by a simple touch of the button on the scanner.

## 5.2 Scanning From One Touch of the Button

1. Place the original document in the scanner, aligning it to the left if it is smaller than letter size.
2. Press the "One Side" or "Two Sides" button on scanner.
3. The scanner will now pull the paper through, using the settings for BulletScan Manager button #1. In addition to using the button on the scanner to scan, you can also use the BulletScan Manager button panel to perform scans.

After the scanning is finished, the destination application will be launched and the scanned image appears in the application.

---

**Note:**

For details information on how to use the BulletScan Manager, please refer to the BulletScan Manager manual in the supplied CD.

---





# 6. Care and Maintenance

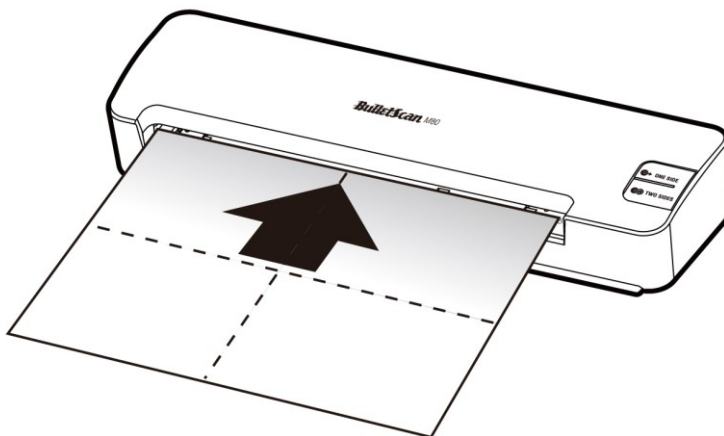
## 6.1 Cleaning the Scanner Glass

Use the included cleaning cloth to clean the rollers and the scanner glass on the following conditions:

- As a guideline, clean the rollers after every 5,000 scans. Note that this guideline might vary based on the type of documents you are scanning.
- The scanned images have streaks or scratches.
- You experience repeated document jams.

To clean the roller and the scanner glass, follow these steps:

1. Open the sealed roller cleaning cloth container, starting at the notch. Take care not to tear the cleaning cloth.
2. Remove the cleaning cloth and unfold it.
3. Place the unfolded cloth into the paper feed slot.
4. Press the Scan button to feed the cloth through the scanner.



---

**Caution:**

Wait two minutes for the components to dry before proceeding to the next step.

---

5. Place one sheet of paper in the scanner. Scan and view the results.
6. If streaks still appear, repeat steps 3 through 5. The cleaning cloth can be cycled through the scanner up to five times within 30 minutes. After that, the cloth will dry out.

# 7. Troubleshooting

## 7.1 Clearing a Paper Jam

In the event of a paper jam, follow the procedures below to remove the paper:

To clear a paper jam:

1. Gently pull the paper from the scanner.
2. Smooth out any wrinkles caused by the jam.
3. Reinsert the paper to the paper feed slot.
4. Resume scanning.

## 7.2 Frequently Asked Questions

**Question: The scanned image always comes out to be too dark.**

**Answer:** 1) Use your application to modify the Gamma setting to 2.2 and 1.8 for your printer and monitor respectively.  
2) Adjust Brightness setting from the TWAIN interface to get a brighter image.

**Question: The scanner works well except for the line art, the lines of which seem much thicker than the original.**

**Answer:** Increase the Brightness or adjust the Threshold setting to adjust the line art image.

**Question:** Feeding paper from the ADF easily causes paper jam.

**Answer:** Make sure to close the front paper tray. While the front paper tray is open, feeding paper from the automatic document feeder easily causes paper jam.

### 7.3 Technical Service

Before contact iVina, please prepare the following information:

- Scanner serial & revision number (located on the bottom of the scanner);
- Hardware configuration (e.g., your host CPU type, RAM size, free disk space, display card, interface card);
- The name and version of your scanning software application;
- The version of your scanner driver.

Find us online at:

[www.bulletscan.com](http://www.bulletscan.com)

## 8. Specifications

**All specifications are subject to change without notice.**

Model Number	M80
Scanner Type	Duplex scanner
Light source	LED
Technology	CIS (Contact Image Sensor)
Optical Resolution	600 x 600 dpi
Maximum Scanning Size	8.5"x14"
Minimum Scanning Size	2.9"x2.1"
Paper Weight	13.3~32 lbs (50 ~ 120 g/m <sup>2</sup> )
ID Cards Thickness:	Up to 1.25 mm (0.05 inch)
Interface	High Speed USB 2.0
Power	5Vdc, 500mA
Power Consumption	< 2.5 watts (operation)
Operation Temperature	10~35°C
Dimension (WxDxH)	290 x 75 x 52mm (11.4 x 3x2 inch)
Weight	0.674 kg (1.5 lbs)



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